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THE CHARACTER OF THE 1937 FIRE SEASON IN REGION ONE

By

H. T. Gisborne, Sr. Silviculturist

Based on the longest record (May 1 to October 31), the greatest number of stations (89 complete and about 150 partially equipped), and the most accurately made measurements to date in this region, this rating is the fourth consecutive attempt to supply both the Forest Service and all adjacent timber protective interests with a basis for determining the efficiency of fire control on their lands. Naturally, if fire danger is below average, costs and losses should likewise be low. Occasionally in the past, however, danger has been average or even high yet costs and losses have been held low as a result of exceptionally efficient work. Without measurements of the character of the season it was then difficult to prove to Boards of Directors, supervising but absentee officers, and others, that the low costs had been attained in the face of relatively adverse conditions. The function of these annual ratings by the Northern Rocky Mountain Forest and Range Experiment Station is to identify accurately and specifically the character of the past fire season and thereby furnish a base against which to compare costs and losses.

The 1937 season on all of the 10 National Forests in northern Idaho and western Montana rated as average, or between 33% and 66% of worst probable danger. Above 66% is called critical and less than 33% is designated as easy.

The following table shows the percentage of worst probable for each Forest for each of the past four fire seasons using July and August, the peak months, as criteria. Although a longer period, June 11 to September 10 or 20, would be even more indicative, previous measurements do not permit such a comparison.

Table 1.--Percentage of worst probable fire danger

Forest	Year			
	1934	1935	1936	1937
	Percentage			
Bitterroot	59	59	44	61
Cabinet	74	48	70	50
Clearwater	78	52	51	50
Coeur d'Alene	63	48	52	36
Flathead	85	52	69	58
Kaniksu	59	30	56	39
Kootenai	67	44	77	47
Lolo	78	59	77	58
Nezperce	81	70	56	54
St. Joe	63	59	49	43

As shown by these data the Bitterroot, Lolo, and Flathead Forests, a geographical group with the long axis lying in the direction of the prevailing southwesterly winds of this region, experienced high average but not critical fire danger. The Coeur d'Alene and Kaniksu Forests, adjacent to each other in the northwest portion of the region, experienced low average but not a really easy season. The remaining Forests were intermediate between these extremes with the Clearwater and Cabinet rating exactly 50% or truly average in danger.

Compared with the preceding three fire seasons the Bitterroot had its highest danger. All other Forests, however, have had more dangerous seasons in 1934, 1935, or 1936. Of all 10 Forests only the Kaniksu in 1935 has reported less danger than the Coeur d'Alene reported for 1937. Weather Bureau rain maps show that for the period April 1 to August 31, 1937, Stevensville, on the Bitterroot, received only 50% of normal precipitation while Coeur d'Alene City received 168% of its normal.

The May 1 to October 31 records for 1937 show that the fire season opened, with class 4 danger, on nearly all Forests on June 29. It ended with class 3 or lower danger on September 24. The length of season was therefore 86 days, which was 6 days more than in 1936, 14 days less than in 1935, and 2 days less than in 1934.

The 1937 season definitely lacked those usually common periods of several consecutive days of class 6 or higher danger which usually produce a large burned acreage. Not a single Forest reported two or more consecutive days of class 6 danger in 1937 although several ranger districts did experience such danger, including a few days of class 7.

The occurrence of lightning storms was lower than average, the records showing storms on 51 days between June 21 and September 10, whereas the 13-year average is 58 days. One region-wide epidemic of lightning occurred on July 27 and 28, the Forest Service experiencing 270 fires from these storms. A second, but localized, epidemic was experienced on the Flathead Forest on September 17. It is seldom that lightning causes material fire danger so late in the season.

For northern Idaho and western Montana the 1937 fire season therefore takes its place in history as merely average in character of fire danger.